

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021442**Date Inspected:** 27-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Qui Wen**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – NWIT Document No: 008411

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment 14W. The weld designations reviewed are as follows:

1. DP3175-001-244, 245, 246, 247, 248
2. DP3176-001-042, 040, 038, 036, 034, 118
3. DP3176-001-120, 124, 126, 122, 208, 206, 204

Bay 14

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) welding of weld joint SEG3020BB-049 located on Bottom Plate to Anchor Plate of OBG Segment 14W. ZPMC Welder is identified as 066239. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

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FCAW welding of weld joint SEG3020BB-050 located on Bottom Plate to Anchor Plate of OBG Segment 14W. ZPMC Welder is identified as 045175. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

Shielded Metal Arc Welding (SMAW) welding of weld joint SEG3020U-589 located on Anchor Plate of OBG Segment 14W. ZPMC Welder is identified as 066695. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2213-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3020AB-134 located on Anchor Plate to Longitudinal Diaphragm of OBG Segment 14W. ZPMC Welders are identified as 047864 and 045246. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U5b-FCM-1.

SMAW welding of weld joint EP3030-001-055 located on Floor Beam to Floor Beam of OBG Segment 14W. ZPMC Welder is identified as 067829. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-B-U2-FCM-1.

SMAW welding of weld joint SA3231C-001-005 located on Sub Assembly Component of OBG Segment 13BW. ZPMC Welder is identified as 067748. ZPMC Quality Control (QC) is identified as Mr. Zhang Linn. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2113-FCM-1.

SMAW welding of weld joint SA3231C-001-145 located on Sub Assembly Component of OBG Segment 13BW. ZPMC Welder is identified as 205096. ZPMC Quality Control (QC) is identified as Mr. Zhang Linn. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2114-FCM-1.

SMAW welding of weld joint SEG3014G-129 and 130 located on Side Plate I-Ribs to Floor Beam at panel point 121 of OBG Segment 13BW. ZPMC Welder is identified as 037996. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2213-Tc-U4b-FCM-1. See the attached picture.

SMAW welding of weld joint SEG3014J-146, 147 and 148 located on Side Plate I-Ribs to Floor Beam at panel point 120.5 of OBG Segment 13BW. ZPMC Welder is identified as 037996. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2213-Tc-U4b-FCM-1.

FCAW welding of weld joint DP3171-001-250 and 251 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 204730. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2132-ESAB.

SMAW repair welding of weld joint DP3172-001-036 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 067588. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20289.

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SMAW repair welding of weld joint DP3172-001-213 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 066155. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20289.

SMAW repair welding of weld joint DP3174-001-394 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 066398. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20313.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Kumar,Vibin	Quality Assurance Inspector
<b>Reviewed By:</b>	Patel,Hiranch	QA Reviewer

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